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ALTERNATIVE HMO MODELS

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Table of Contents

Page

MODELS AND TABLES

INTRODUCTION

Health maintenance organizations (HMOs) assume a multiplicity of organizational formats. For example, not all HMOs own their own facilities. There are no other HMOs structured like the Kaiser-Permanente Medical Care Program, and even Kaiser assumes different structures in different geographical settings.

The implications of the variability of HMO organizational structures are numerous. Discussions of break-even enrollment levels, start-up costs, and market penetration levels are meaningless if they are not placed within the context of the type of HMO organization under consideration.

Regulators, planners and developers of HMOs all make critical decisions which impact powerfully upon the viability of HMO organizations. This paper provides information that will clarify some of these issues and assist those involved in decisionmaking processes that affect HMOs.

Order of Discussion

The discussion begins with a broad, generic definition of HMOs. It does not limit eligibility to group practice programs, nor does it conform to any existing legislative definition of HMOs. The definition mentions those characteristics believed essential to meet the objectives intended for health maintenance organizations.

Next, eight alternative HMO organizational models are described. The variation occurs in the relationships between the plan (the entity that holds the contract with the members), its physicians, and its hospital(s).

Section III integrates Public Law 93-222, The HMO Act, into the discussion. Because this legislation represents such an important position in current HMO development, its provisions must be noted. However, less than one-half of currently operating HMOs have been qualified under the provisions of this legislation. Moreover, states are enacting legislation that provides HMOs with some of the advantages of the federal legislation, (e.g. mandatory dual choice), without some of the restrictive provisions attending the federal law.

The paper concludes with a general discussion of some of the financial implications of regulatory approaches that have been applied to HMOs. Furthermore, these issues are discussed within the context of the alternative models presented in Section II.

I. THE HMO CONCEPT

A. Current System Deficiencies

The traditional system of health care delivery and financing increasingly has come under attack. The insatiable demand for more and more services has produced a health care system that has grown by accretion with little structural change. Frequent criticisms of the existing health delivery system are directed at:

- Accessibility
- Overbedding
- Overspecialization
- Third-party reimbursement programs

The traditional unstructured network of independent physicians presents an inconvenient, confusing, expensive, and often inaccessible maze to the non-physician needing health care. Many consumers are unable to identify or locate an appropriate entry point into the system and a substantial amount of improper self-referral occurs.

It is alleged that there are too many short-term, acute care beds and too few nursing home beds. If supply creates its own demand in health care, then this bed surplus leads to overutilization of hospitals.

Approximately 40 percent of practicing physicians are in primary care specialties, compared to 75 percent forty-five years ago. Overspecialization results in payments of higher fees for services rendered by specialists, consumption of more hospital services, and a tendency to treat symptoms within the confines of a single specialty.

Frequently these problems are blamed on the manner in which health care providers are reimbursed. Third-party reimbursement programs were originally conceived as hospital insurance rather than health insurance programs. Consequently, most third-party programs cover the costs incurred in treatment of illness rather than the prevention of illness. Furthermore, many third-party programs cover services provided on a hospital inpatient basis but will not pay for the same service if it is provided on an outpatient basis.

B. The HMO Concept

In a systematic way, HMOs organize the traditionally fragmented delivery of medical care. HMOs must guarantee access to care for all of its members in a timely fashion. The system is characterized by this ease of entry. Primary care physicians play a critical role as they guide members to appropriate sources and levels of care. Because an HMO is designed as a system it makes better use of health resources. The addition of personnel and equipment follows a plan which focuses on the health needs of a defined population.

In addition, by using outpatient services, well organized HMOs serving a relatively stable population, have the potential for delivering care at lower costs than the traditional system.[1]

Not all of the deficiences in the current system of health care delivery and financing can be solved or even addressed by HMOs. However, a properly designed program has the potential to improve upon the traditional system.

C. Definition of HMOs

What is an HMO? There is no single, generally agreed upon definition. This fact has caused much confusion for those responsible for regulating HMOs. It also has caused problems within the HMO movement due to the poor performance of organizations which liken themselves to HMOs, but, in fact, are not HMOs. The discussion that follows will present a generic definition of HMOs and will point out some of the necessary elements of a properly designed program. An HMO is a formally organized system of health care delivery that combines the delivery and financing functions and provides comprehensive services to an enrolled membership for a fixed, prepaid fee.

An HMO is described as a system rather than an organizational entity. However, unlike the traditional, fragmented health delivery system, the HMO's health care system must be formally organized with the authority and responsibility for each of its various components clearly specified.

Most HMOs are independent and separately incorporated. However, an HMO may be created as a joint venture in which the HMO "entity" is evidenced solely by contractual arrangements between the necessary elements of the system. For example, the Greater Marshfield Community Health Plan in Marshfield, Wisconsin is not a separate organization. It is the trade name used to identify a benefit package providing HMO benefits. In Marshfield, the HMO is a system that includes Blue Cross and Blue Shield, the Marshfield Clinic, and St. Joseph's Hospital. Contracts between these organizations govern the responsibilities of each party in the HMO system and describe the system's operational features. Evolving laws and regulations make it more difficult to operate an HMO that is not separately incorporated, but that does not mean that the beneficial aspects of an HMO can be realized only by creating a new legal entity.

The feature which most clearly differentiates HMOs from existing health delivery and financing systems is the combination of delivery and financing within one organized system. This combination approach places providers of health care at financial risk for the services they render. Under traditional programs, the providers are usually reimbursed by third-party payers with whom they have no organizational relationship. While Blue Cross and Blue Shield plans enter into contracts with providers, these contracts have a more limited purpose than an HMO's provider contracts. Traditionally, third-party payers do not limit the total financial resources available to pay for health care and, as a result, do not place providers at financial risk.

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[1] The differential utilization of inpatient facilities is significant even on an age-adjusted basis. Toward a Comprehensive Health Policy for the 1970's A White Paper, U.S. Department of HEW. May, 1971, p.9.

Some HMO definitions contain the term "nonprofit." There is no magic in the nonprofit form of organization, and proprietary plans can be as effective as nonprofit plans in accomplishing the objectives of an HMO. However, legislation generally gives preferential treatment to nonprofit plans.

Some definitions refer to "group practice" and "salaried physicians." The following discussion of alternative HMO models will show that physicians participating in HMOs are not always organized in groups, nor are they always salaried. Physicians are compensated in a variety of ways, including salaries, capitations, fee-for-service, bonuses, etc. Hospitals, on the other hand, are nearly always paid fee-for-service.

Finally, some definitions describe an HMO as an organization which delivers services to a "voluntarily enrolled" membership and prices its services on a "community rating" basis. While these features are commonly found in HMOs, they are not universal characteristics, nor are they essential to HMO success. For example, an HMO might include in its delivery system all of the providers in a given geographical area. In such a situation, an employer could decide to enroll all of its employees in the HMO, since no one would be required to sever an existing physician relationship. In this case, dual choice and voluntary enrollment on the part of individual members become virtually meaningless. In some areas, particularly rural areas, the possibility of this situation occurring is high. Again, it typifies Marshfield, Wisconsin.

Community rating is sometimes confused with the fact that HMOs provide covered service for a fixed, prepaid fee. These terms are not synonomous and it is possible to provide services for a fixed, prepaid fee under an experience rating system. It is important to note that the term "fixed payment" is descriptive of the flow of money from the subscriber to the HMO. It does not describe how providers get paid for rendering services. The use of the term "fixed, prepaid fee" in the definition implies that there will be no retroactive adjustment in the amount paid by the subscriber for covered services. That is, the HMO sells its product at a guaranteed price. That price, however, could be a function of the utilization experience anticipated for the employer group in question. Once the price is established, it remains fixed until the contract renewal date. Should the rate established prove to be inadequate, the HMO is precluded from assessing retroactive premiums and would not be permitted to recoup past losses in future premiums. Still, the price charged various groups for successive periods of coverage can be based on that group's anticipated utilization rather than the HMO's community of members.

Moreover, the term "fixed, prepaid fee" does not imply that the HMO may not receive more than the guaranteed premiums to finance its delivery system. Most HMOs avail themselves of insurance protection which provides reimbursement for extraordinary losses attributable to individual subscribers or to the plan's aggregate experience.

In summary, an HMO must be an organized system for health care delivery that combines fiscal responsibility with delivery responsibility. In effect, it must place the providers of care at financial risk for the services provided. If the funding is inadequate to finance all health services required by plan members, the providers must render such services at reduced levels of payment. An HMO assumes responsibility for a defined membership, who, through the payment of a fixed fee, are entitled to care from the plan. Finally, the plan must provide or arrange for the provision of a comprehensive range of health care services in order to encourage early detection and treatment of illness and to allow such care to be provided in the most efficient manner.

D. How HMOs Address Current Problems

HMOs reunite the flow of dollars with the flow of services through the health care system. Combining the delivery and financing functions serves to make providers more fiscally accountable. The movement away from fee-for-service reimbursement better aligns the objectives of providers with those of consumers. Limitation to a fixed pool of funds out of which the health care of an entire population must be paid creates a natural incentive for providers to be more concerned over both the costs and the efficiency of their own actions and the actions of their colleagues. Thus, HMOs have better potential for effective peer review and quality assurance programs.

HMO benefit programs are designed to encourage prevention of illness and early treatment of both illness and injury. Nearly 70 percent of the benefit dollars paid out under traditional health insurance programs is for hospital care, whereas the comparable figure in many HMOs is between 25 and 35 percent.[2] Since nearly all types of health services are included in HMO benefits, HMOs free the treatment mode from the traditional financing mechanism's biases. At the same time, HMO programs are designed to encourage use of outpatient services, thus eliminating financial and access barriers that may exist in traditional health insurance programs.

Additional benefits may result from operation of an HMO. For instance, HMOs introduce an element of competition into the health delivery system. In the long run, large premium payers (e.g. major employers) can see the benefits of preventive care and reduced hospitalizations. Furthermore, HMO benefit packages sometimes cost less than traditional indemnity plans. The same competitive element also serves to educate both consumers and providers. Providers who render care to both HMO and private patients frequently modify their behavior concerning hospitalization of their fee-for-service patients to coincide with their approach to HMO members. In addition, HMO members gain a better understanding of how to use the health delivery system effectively and efficiently.

Finally, the HMO system provides a useful base for measuring performance. Data can be generated which can be utilized to evaluate the efficiency with which an HMO serves its population. This is virtually an impossible task under current programs of health care delivery. Service to a defined population over time makes it practical for an HMO to engage in sickness prevention activities despite the fact that health status and financial benefits will not materialize until well in the future.

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[2] Health Maintenance Organization Program Status Report, December, 1976, U.S. Department of HEW, DHEW Publication No. (HSA) 77-13022. 1977. p. 31.

II. ALTERNATIVE HMO MODELS

The extent to which a specific HMO will be able to produce the improvements noted will depend upon such factors as the maturity of the plan, quality of management, sponsorship, etc. One of the most significant factors will be the organizational structure of the HMO. This section will present eight organizational configurations into which nearly all currently operating HMOs can be placed. The discussion is concerned only with the relationship between three key elements of the HMO -- hospitals, physicians, and the plan or organization that actually enters into contracts with members. While the plan may contract for various administrative services such as marketing, data processing, actuarial services, etc., the discussion will not deal with these contractual arrangements. Thus, the eight models presented differentiate HMOs according to medical services arrangements.

In general, the models can be divided into two groups: those HMOs that own their own hospitals (Models I and II) and those that contract with community hospitals for inpatient services (Models III through VIII). One very important feature distinguishes the first four models to be discussed from the subsequent four models. In Models I through IV, the physicians are brought together, either as salaried employees or members of a separate group, for the sole purpose of providing services to HMO members. This does not mean that non-HMO members are absolutely forbidden. Treatment may be provided to fee-for-service patients on one of three bases. First, HMO physicians obviously will care for non-members in emergency situations. Second, if a physician recruited to an HMO has an established fee-for-service practice, generally these patients will continue to be seen until they make other arrangements. Finally, when there are few prepaid members, HMO physicians may accept fee-for-service patients to provide revenues to offset the cost of maintaining a core of primary care physicians. In all cases, however, the intent eventually is to provide only prepaid care. In those cases where fee-for-service work is performed, the fee-for-service revenues are pooled rather than paid to individual physicians rendering care.

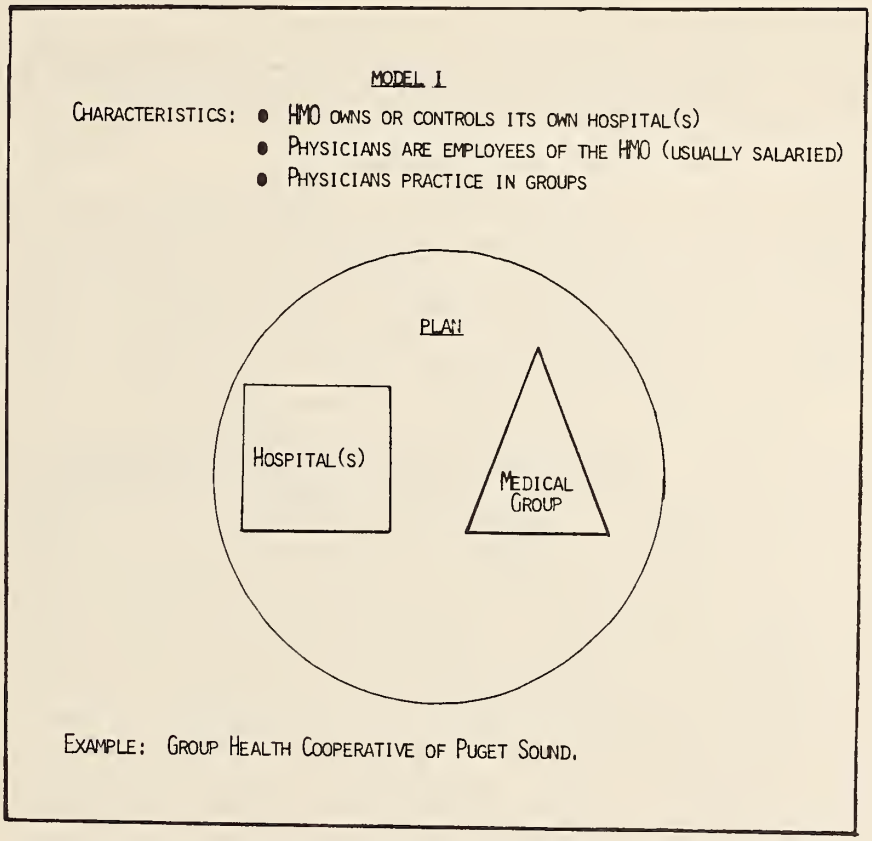
One additional characteristic of the first four models must be noted. It is invariably the case that the initial complement of HMO physicians will be unable to provide all of the health care services covered by the membership agreement. Some services, usually specialty services, have to be purchased by the HMO from physicians who are not technically plan providers. The services are commonly purchased on a fee-for-service or hourly basis until the HMO develops a membership base adequate to support such specialists on a full-time basis "in house."

A. Models I and II: HMO Owns or Controls Hospital

1. Model I

Model I typifies the most highly integrated organizational structure. The HMO owns or controls its hospital facilities and the physicians who render services to HMO members are salaried employees of the HMO. HMO members are required to come to a single site to receive services, since the physicians practice in a

group setting.[3] Both the hospital(s) and physicians render care exclusively to HMO members.[4] These relationships may be illustrated as follows:



Under this arrangement the HMO directly controls most of the resources required to provide covered services to its membership. Thus, the most efficient number of hospital beds, personnel, and other resources can be maintained. HMOs that own hospitals have identified several advantages of a hospital-based system:

"1) Continuity of Care. The same physicians staff hospitals and outpatient facilities, enhancing continuity and coordination of care.

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[3]Care may be provided at multiple locations, but the physicians practicing at these satellite locations are still employees of the HMO.

[4]Although the prime purpose of the HMO is to render care for its members, care is provided for non-members in emergency situations. It also is inevitable that HMO physicians who had been in private practice will bring some fee-for-service patients with them. While these patients may still be treated by the physicians on a fee-for-service basis, additional fee-for-service patients are not incorporated in their HMO practice.

2) Composite Medical Record. A medical record that combines a member's inpatient and outpatient activity can be maintained. If logistics or staff policies require separate hospital and outpatient records, access to patient information can be established by filing each patient's records according to a single medical service number.

3) Predictability of Allocating Inpatient Services. Since there is a defined population with a predictable pattern of hospital utilization, accurate estimates of bed and hospital service needs can be made.

4) Financial Advantages. Since personnel, services and equipment are used for both inpatient and outpatient functions, duplication and costs are reduced. In addition, the defined population, with its predictable pattern of service utilization, enables the HMO successfully to match service demands with supply. As a result, the cost of building and maintaining excess beds and expensive, under-used medical technology is minimized.

5) Elimination of Contractual Stipulations. One standard operating procedure for community hospitals is the requirement of laboratory tests (i.e. [complete blood count], urinalysis and chest x-rays) for each incoming patient. However, these tests can often be done less expensively on an outpatient basis and do not need to be repeated on an inpatient basis. With hospital ownership, the HMO can eliminate the repeating of such tests. Another advantage of hospital ownership is the reimbursement arrangement for basic inpatient services. As will be discussed further in Model III, the most common reimbursement arrangement obtained by HMOs for hospital services is charges. This, of course, is the least attractive reimbursement arrangement....HMOs also face the common problem of obtaining staff privileges for their physicians at non-HMO hospitals. With hospital ownership, the difficulties encountered in obtaining staff privileges is eliminated."[5]

Even though Model I offers the advantage of maximum control over the resources needed to provide health services, Group Health Cooperative of Puget Sound is the only operating HMO exemplifying this Model.

2. Model II

Model II HMOs also own their hospital facilities. Unlike Model I, however, the physicians are not employees of the HMO, but are members of a separate legal entity, a group practice which contracts exclusively with the HMO to

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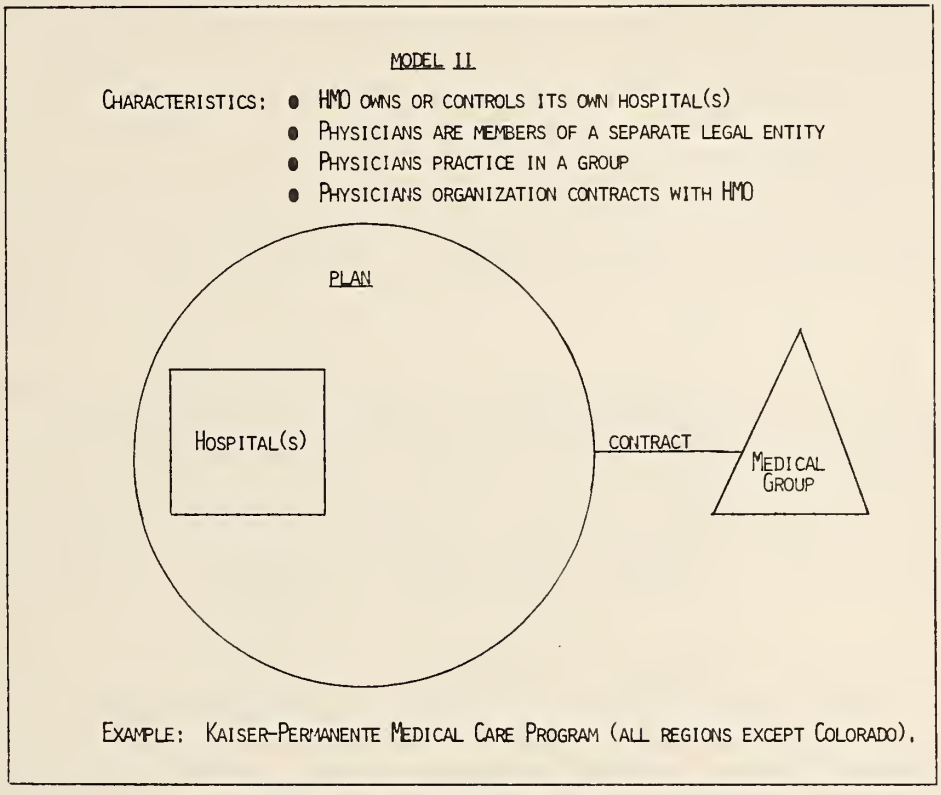
[5]Kaiser Foundation Medical Care Program, Annual Report 1976: Facility Planning in an Organized System of Health Care (Oakland, California: Kaiser-Permanente Medical Care Program, 1976).

provide medical services.[6] The group practice is then paid for serving HMO members on a capitation basis, i.e., a set dollar amount per member per month. This model can be characterized as follows:



The key operational difference between the Model I and the Model II medical staff structures is the way physicians receive payment. In Model I, individual physicians negotiate a salary with HMO management. Under Model II, the physician group negotiates a capitation payment with HMO management. The capitation payments provide the entire revenues from which individual physicians are then paid.[7]

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[6] See Footnote 4, Supra.

[7] In Model II, the capitation payment negotiated by the medical group with the HMO may cover the physicians only (i.e. Kaiser-Permanente: Ohio Region), or may cover all health professionals (i.e. Kaiser-Permanente: Southern California Region). If the capitation payment only covers the physicians, then the auxilliary health professionals must be salaried employees of the plan or the hospital.

There is a great deal of discussion on how these varying physician arrangements affect physicians, the HMO, and its members. The difference between Model I and Model II usually is not apparent to HMO subscribers, and probably has little impact on provider-member relations. However, there appears to be growing interest among HMO physicians in forming their own independent organization and providing services to the HMO on a contractual basis. This interest increases as the HMO grows in size. This can be attributed to at least two factors. First, a relatively large membership is required to support a medical group on a capitation basis. It is more common to find salaried physicians in smaller HMOs because reasonable capitation payments would not be adequate to meet the financial requirements of the medical staff. A subsidy from the plan would be necessary. Second, in large institutions it has been found that an effective means of maintaining a strong voice in policy decisions is through a separately organized group. For this reason, it is not surprising to find more interest in separately organized medical groups in large HMOs.

Few operational HMOs fall within this classification.[8] As in the case of Model I, the difficulties entailed in hospital ownership are the major impediments. The Kaiser-Permanente Medical Care Program is the only HMO that meets the Model II criteria. In all of its six regions, Kaiser contracts with physicians' groups to render care to its membership of over three million persons. Except in Colorado, Kaiser owns its hospitals. Thus, the Colorado Kaiser Plan cannot be classified as Model II: Instead, this plan falls into a category later described as Model IV.

There are a number of barriers to hospital ownership. First of all, a relatively large membership is required to support a hospital. In planning the size of a hospital, Kaiser uses a planning assumption of 1.6 to 1.8 beds per 1,000 members at 85 percent occupancy (however, actual beds per 1,000 are below this level). Assuming utilization of 500 inpatient days per 1,000 members per year, this means that a membership of approximately 125,000 is needed to support a 200 bed hospital.

A second barrier to hospital ownership stems from the growth of governmentally-dictated constraints on private health facility construction. State and federal governments have responded to hospital cost inflation and overbedding by passing legislation designed to reduce hospital construction. Thus, those HMOs desiring to own hospitals have been forced to acquire rather than build. However, acquisition poses several problems. Often, hospitals that are willing to be acquired are in financial difficulty and have low occupancy rates. Significant managerial and financial resources are required to rectify such a situation. An additional issue faced in acquisition is what to do with the existing medical staff of the acquired hospital.

While developing HMOs do not have the financial resources to acquire, build, or support their own hospital, they evidence increasing interest in hospital ownership as they grow. For example, the Harvard Community Health Plan re-

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[8] Even though very few operational HMOs fall within the Model II classification, one half of all HMO membership falls within this category.

cently acquired a small hospital. Although the Plan still depends on community hospitals for most of its inpatient care, eventually the Plan may own a sufficient number of hospital beds and services to become entirely self-sufficient.

B. Models III - VIII: HMO Contracts for Hospital Services

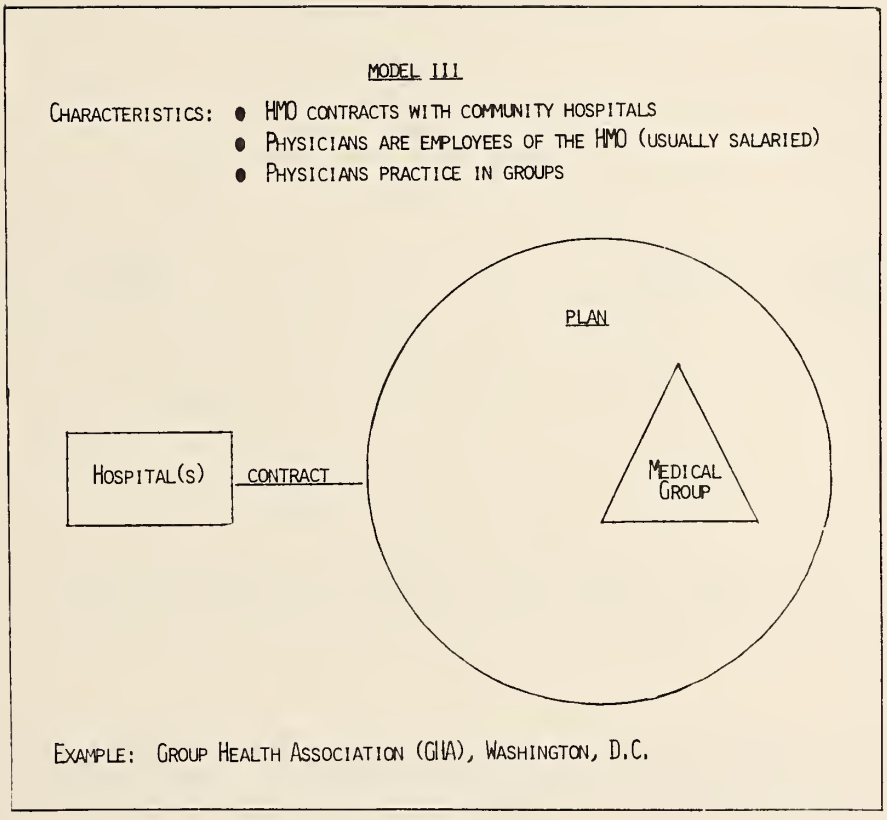
In Models III through VIII, the HMO does not own its own hospital. A key feature of Models III through VIII (as distinguished from Models I and II) is the contractual reimbursement arrangement which exists between the HMO and the hospital. In general, three types of reimbursement arrangements can be found in the contracts HMOs have with hospitals. The first is based on hospital charages. Even though this is the most expensive reimbursement relationship, it is also the most common. The second is cost-based reimbursement. This contractual agreement is made either with the hospital, via Blue Cross, or with the hospital directly. Since costs are commonly less than charges, HMOs strive for this method of reimbursement. The least common reimbursement arrangement may be referred to as "negotiated rate." It might be a discount from charges, cost-plus, or some other agreed upon payment.

The attractiveness of the hospital reimbursement arrangement that an HMO is able to negotiate depends, of course, on its bargaining power. There are several factors that directly affect the HMO's bargaining position. These include such factors as: (1) size of the HMO; (2) number of HMO members utilizing inpatient services; (3) level of overbedding within the community; (4) level of competition within the community; and (5) strength of administrative relations with hospital administrators and physicians within the community.

1. Model III

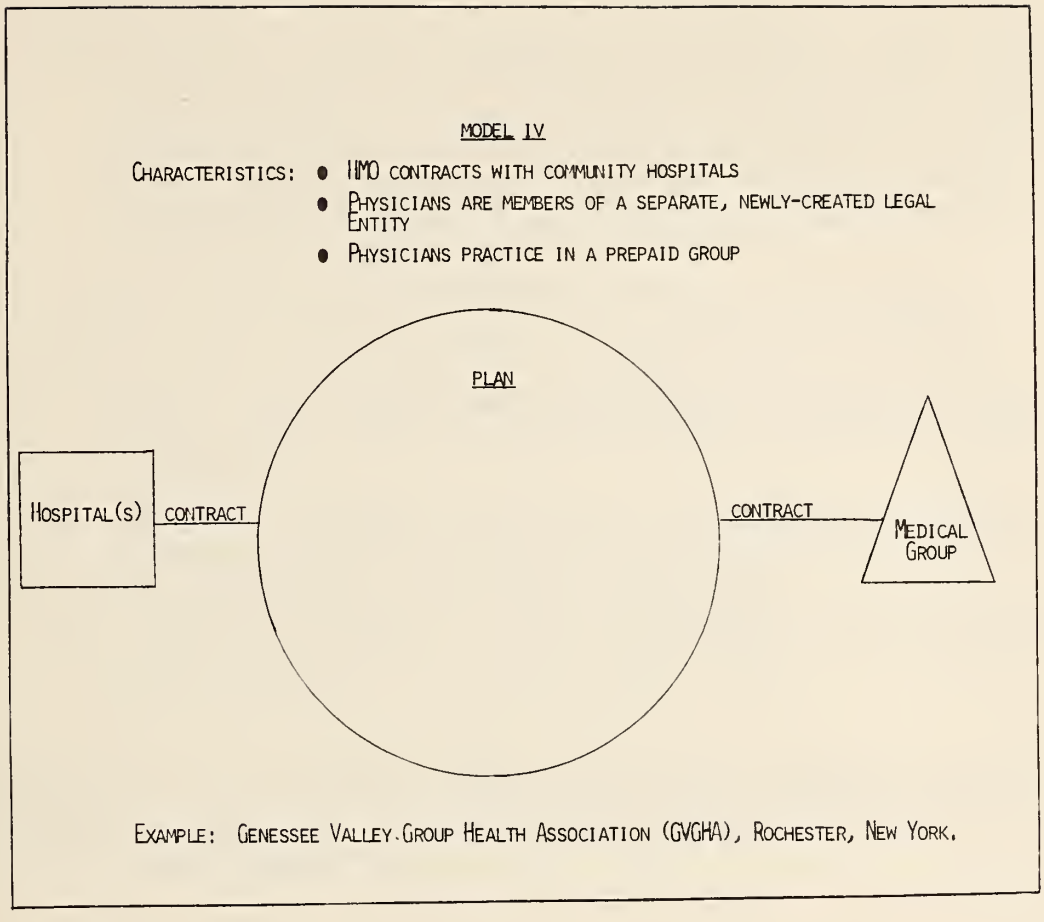
Under Model III, the HMO contracts with community hospitals for inpatient services. As in Model I, the physicians are salaried employees of the HMO. Non-hospital care, which is provided solely for HMO members, is rendered in a group practice setting. Model III is characterized by the relationship shown below.

Model III is a common organizational arrangement found among recently developed HMOs. The Harvard Community Health Plan and the Rutgers Community Health Plan are two such examples. The oldest and largest HMO of this type is Group Health Association of Washington, D.C.



2. Model IV

Model IV is similar to Model III insofar as inpatient services are contracted from community hospitals. However, under Model IV, the physicians are members of a separate organization which contracts with the plan to provide medical services. Physician reimbursement is usually on a capitation basis. As in the medical staff organization of Model II, the physician group is established to serve the HMO membership only. The illustration clearly indicates that HMOs characterized by Model IV organize their delivery system through contractual relationships with provider organizations.



The basic difference between Models III and IV is the organization of the physician component. In Model IV, physicians are members of a separately incorporated medical group, whereas in Model III, the physicians are employees of the HMO. This difference in physician organization is the same as that encountered between Models I and II. The previously noted impact of these varying physician arrangements on the HMO members, the physicians, and the HMO also hold for Models III and IV.

Models III and IV are similar in that inpatient services are contracted from community hospitals. This means that these HMOs are not able to capture all of the advantages and efficiencies offered by hospital ownership. However, to gain some of the advantages of hospital ownership, HMOs can establish criteria for use of non-owned hospitals. For example, Kaiser has formulated criteria for using non-HMO hospital resources. The following are characteristics developed by Kaiser as desirable features of an arrangement with a community hospital:

"1) Beds and related facilities and services must be available at a single location and at a reasonable cost. Use of beds in two or more facilities creates problems of communication, and wastes physicians' time traveling between hospitals.

2) It must be economically feasible to locate a Program medical office facility adjacent to the non-Program hospitals.

3) The Hospital must be available on a contractual basis which is equal in duration to the Program's commitment for related medical offices. Kaiser-Permanente must construct or lease medical offices that are in or near the hospital it uses. Either approach requires a long range commitment that must be matched by a commitment to supply an adequate number of beds and supporting services.

4) Qualified physicians associated with the Program must have full staff privileges in the non-Program hospital.

5) Charges to the Program by the non-Program hospital for care of Health Plan members should not exceed charges for similar care to Blue Cross-Blue Shield or commerical health insurers.

6) Admission, laboratory and X-ray tests must not be required by the non-Program hospital if they have been performed on an outpatient basis shortly before admission.

7) Inpatient laboratory and X-ray procedures should be required only if necessary for quality medical care or if mandated by law."[9]

It is important to note that few HMOs will be able to negotiate an arrangement with all of these features. As in attaining a desirable hospital reimbursement arrangement, the HMO's bargaining power determines its ability to gain these conditions.

3. Model V

Model V HMOs contract for hospital services as described in Models III and IV but physician services are provided by an established fee-for-service group practice. That is, the HMO contracts with a private fee-for-service group to render care to HMO members. The physician group merely incorporates the prepaid patients into its fee-for-service practice. Generally, the HMO business done by the group practice is a minor part of the group's total activity.

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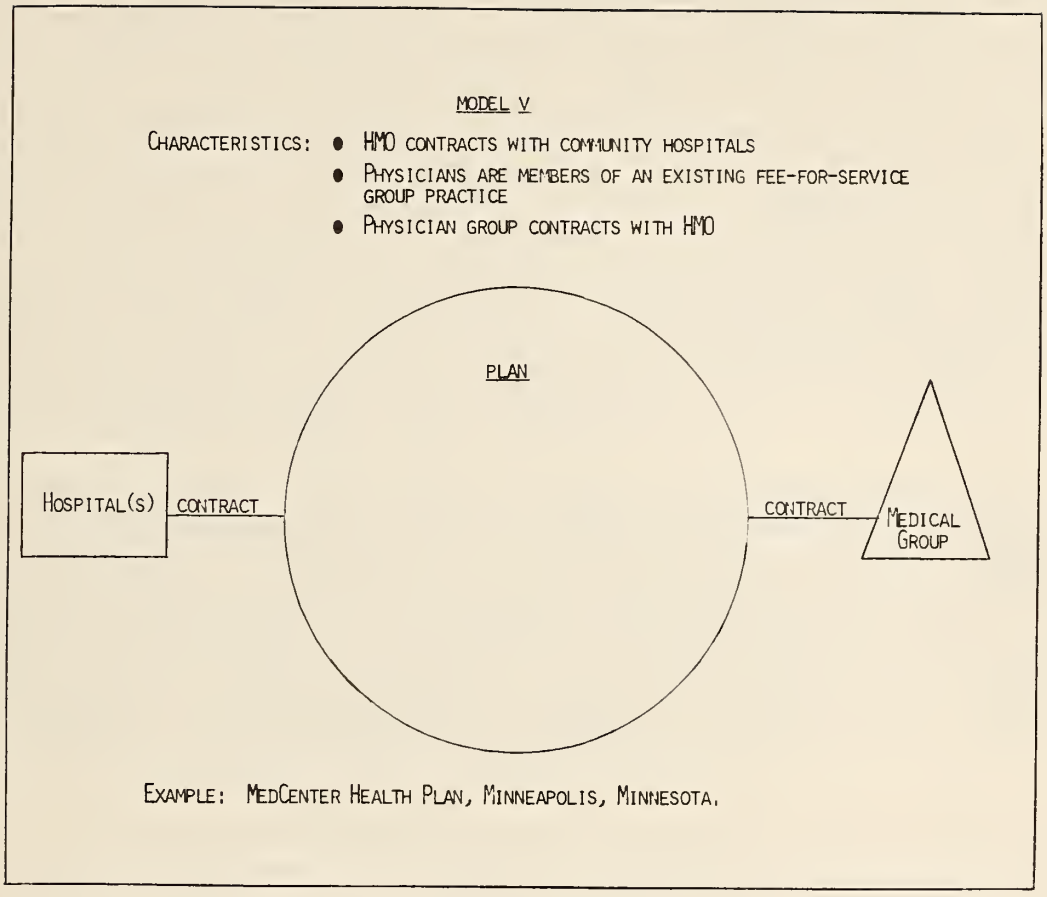
[9]Kaiser Foundation Medical Care Program, Annual Report 1976: Facility Planning in an Organized System of Health Care (Oakland, California: Kaiser-Permanente Medical Care Program, 1976), pp. 15-16.



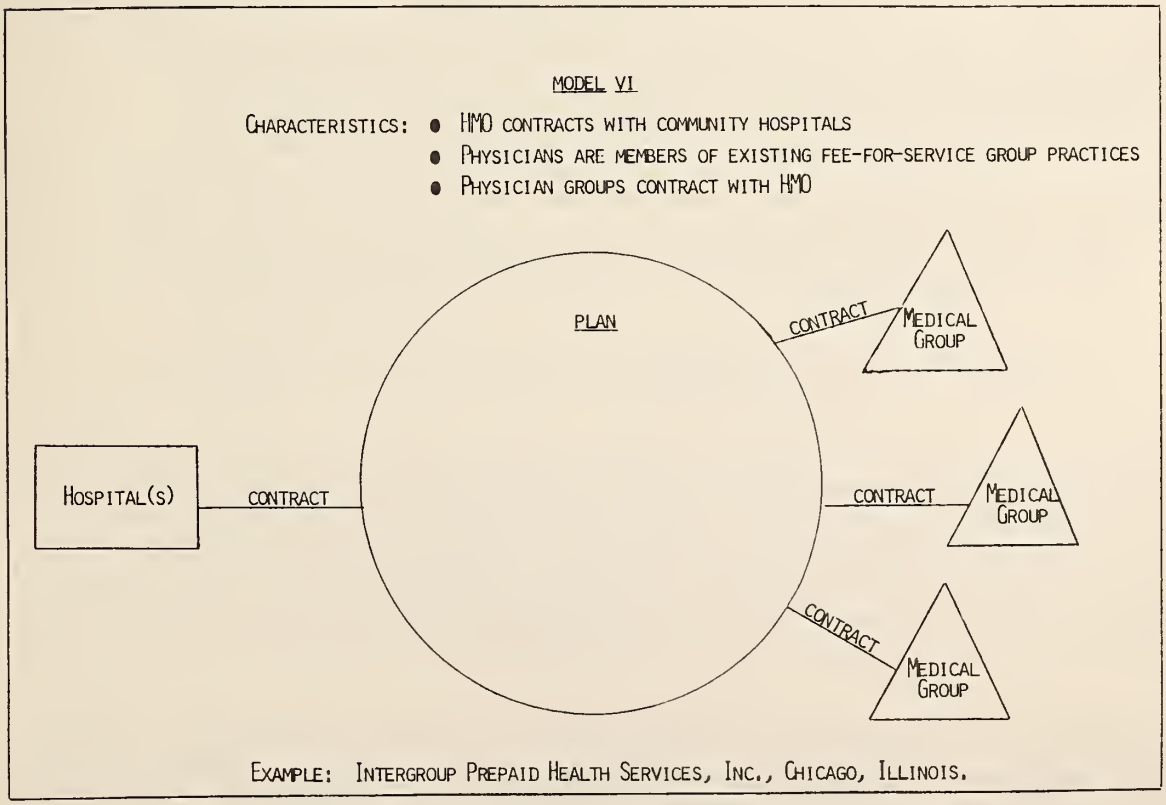
The illustration shows no organizational difference between Models IV and V. However, a fundamental difference exists from the standpoint of both HMO development and regulation. In Model IV, the physicians were brought together in a newly created organization for the sole purpose of providing prepaid care. No such organizing work is necessary under Model V. The HMO merely takes advantage of the interest shown in prepayment on the part of an existing multi-specialty, fee-for-service group thus reducing the time required to organize the HMO. This seemingly slight organizational difference reflects a major difference in the operations of the plan. In Model IV, there is a total commitment to prepaid health care, whereas in Model V prepayment is a minor activity, at least initially.

Generally speaking, if an existing group can be identified as an acceptable provider organization by the HMO's sponsors, it may reduce developmental costs and initial operating losses. The need for the HMO to subsidize the physicians in an existing group when HMO membership is low is likely to be less than the need to subsidize physicians who perform services solely for HMO members. This potential financial advantage has to be weighed against reduced control over a key element of the plan and the possibly lower level of physician commitment to the plan.

4. Model VI

Model VI is commonly referred to as a group practice network. The delivery system is organized through a series of contracts with physicians and hospitals. Contracts for physicians' services are established with already existing fee-for-service, multi-specialty group practices. Hospital contracts are arranged with those hospitals regularly utilized by the participating medical groups. Each medical group is a separate entity and, other than their participation in the HMO program, they have no relation to one another. It must be pointed out that Model VI is not meant to characterize all HMOs with more than one outpatient delivery point. If an HMO has more than one delivery point and the group is staffed by physicians salaried to the plan, it would fall under Model I or Model III. If the delivery points represented satellite centers of a single, separately incorporated group practice, it would fall under Model II, IV or V. Model VI is reserved for those HMOs that have multiple delivery sites in which each site is a free-standing, separately organized medical group practice.

Most of the time, this type of HMO is found in large metropolitan areas where a single delivery point would be unable to attract a sufficient number of prepaid members. Obviously, it is less difficult to market a prepaid program with delivery points accessible to those residing in different parts of a large geographical area. Inter-group Prepaid Health Services, Inc., developed by CNA Insurance, and HMO of Illinois, Inc., developed by Illinois Blue Cross and Blue Shield, both serve the Chicago area. Each of these programs contracts with approximately 20 separate group practices. Some of the medical groups have contracts with both HMOs.



5. Models VII and VIII: Physicians Practice Out of Own Offices

Models VII and VIII represent HMO organizations significantly different from the first six models. All of the plans discussed thus far involve situations where the physicians practice in a group or groups. The two remaining models are characteristic of those HMOs where the physicians participating with the plan continue to practice out of their own offices. These HMOs are variously referred to as "foundation models," individual practice associations ("IPAs"), and "open-panel" programs. None of these descriptions are appropriate.

Foundations for Medical Care may be organized to perform any of a variety of functions, including health care delivery. Under the foundation approach, physicians enter into contracts directly with consumers or with third parties. Providers are paid on a fee-for-service basis. Frequently, a separate entity is created to coordinate hospital admissions and discharge planning. Foundations for Medical Care rarely place physicians at financial risk. Such risk is essential to meet the definition of an HMO put forth earlier in this paper. Hence, the term "foundation" can be used to describe an HMO in extremely limited situations.

The term "individual practice association" is a legislative term found in the federal HMO Act. It refers not to a type of HMO but rather to the physician component of an HMO. Moreover, not all HMOs using individual practitioners involve an IPA. The IPA can be viewed as a legal entity or professional association separate from the HMO that provides a mechanism through which fee-for-service practitioners are able to participate in a prepaid program, but maintain sufficient control through the physician controlled IPA. The physicians who participate must agree to certain conditions of membership. These usually include an agreement to:

(1) Conduct medical practice in accordance with the purpose and policies of the IPA, as explicated in its articles of incorporation, bylaws, and resolutions adopted by the IPA's Board of Directors and membership.

(2) Comply with the peer review procedures established by the IPA.

(3) Accept, as payment in full, any reimbursement for services provided under the contract the IPA has entered into with other parties.

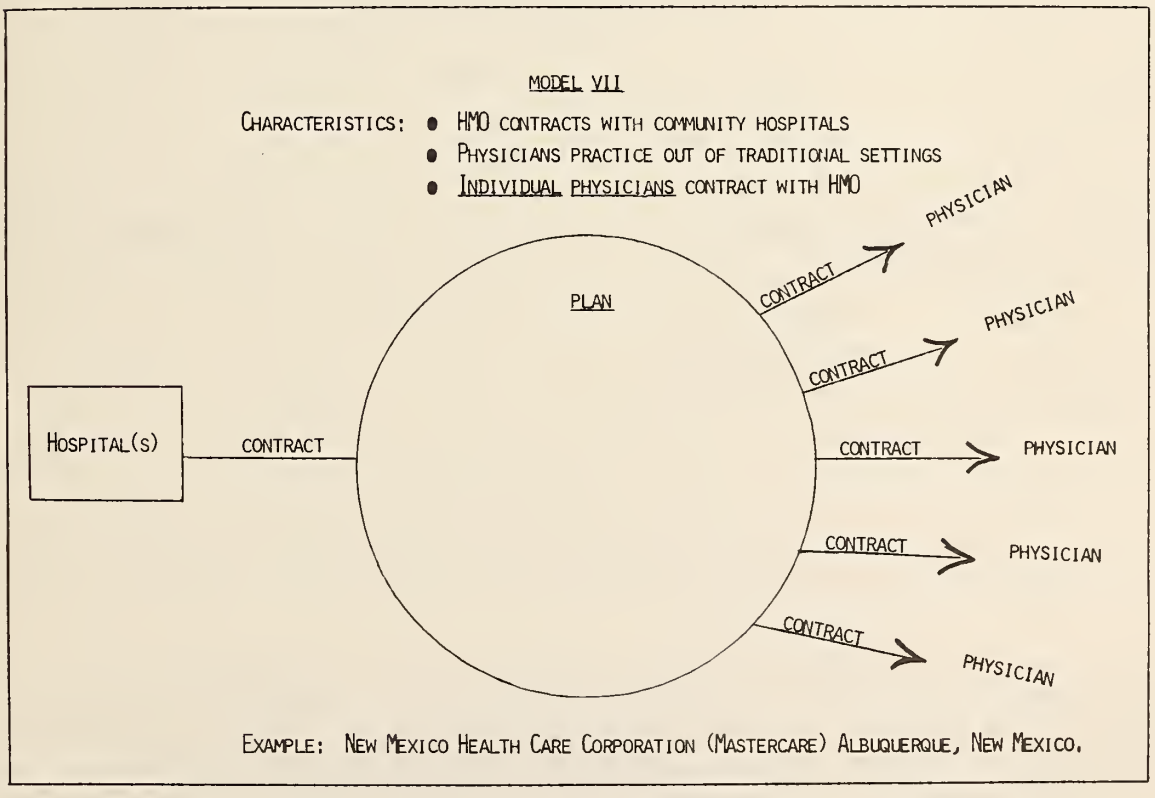
(4) Accept all or part of the financial risk for delivering medical services within a fixed budget.

The IPA entity must hold the service contracts with the individual professionals. Through a service agreement between the HMO and the IPA these services are contracted for by the HMO for its members. Even though the HMO has the ultimate responsibility for the delivery of services to its enrollees, it is the task of the IPA to contract with the providers, arrange payment with them, monitor their utilization, and direct their overall activities. Typically, most of these tasks are performed for the IPA by the administrative arm of the HMO.

Open-panel implies that either all physicians in a community are eligible to join the HMO, or that the HMO member may receive covered services from any physician in the community. Neither situation is correct. Physician eligi-

bility is sometimes limited to members of a hospital medical staff. Moreover, once the list of participating doctors is finalized, HMO members must use those physicians or accept financial responsibility for services they consume.

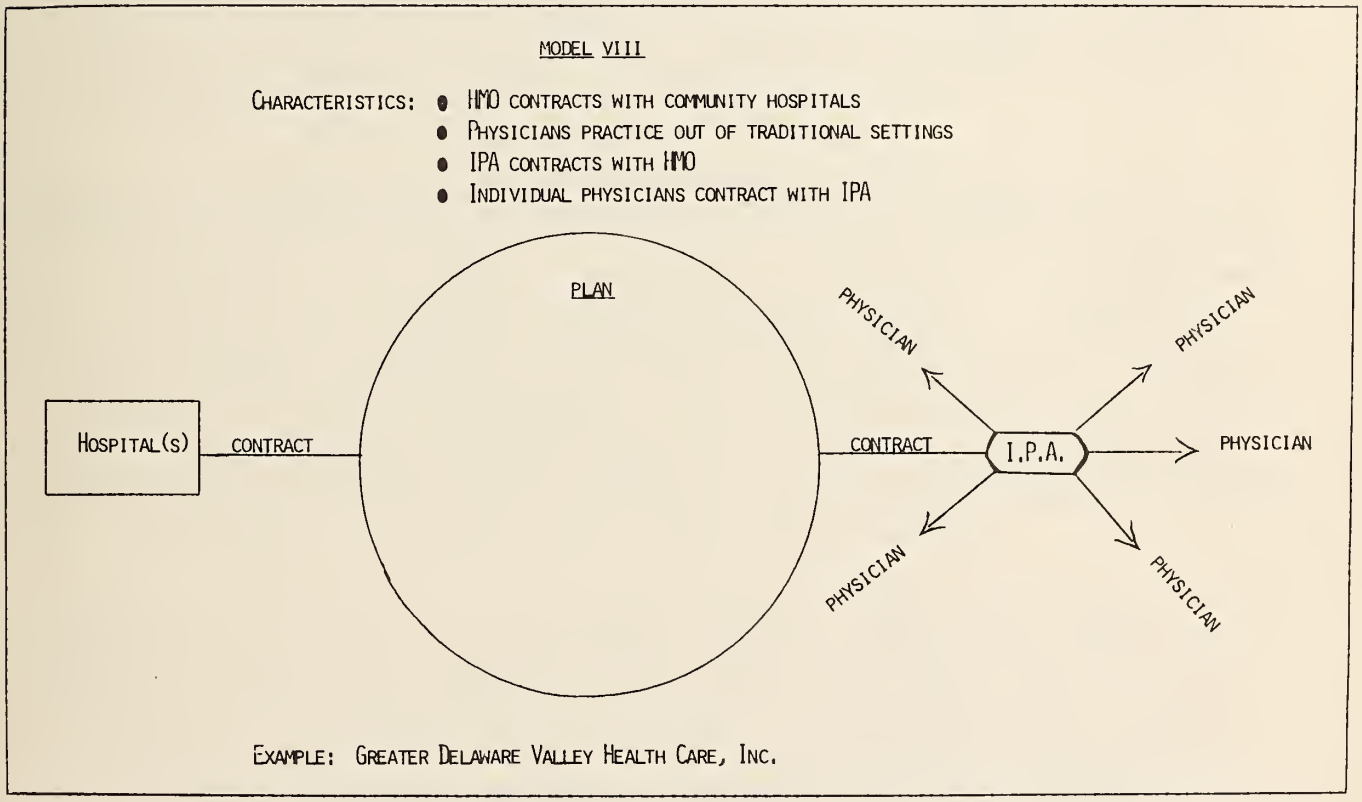
a. Model VII. Under Model VII, participating physicians typically are drawn from those physicians in the community already engaged in private practice. Normally they represent solo practice and single specialty group practices. Sometimes all of the physicians in the community are eligible to participate in the HMO while in other cases, eligibility is more narrowly defined. For example, participation may be limited to the medical staff of a designated hospital. A physician's HMO participation is evidenced by a contract entered into between the plan and each participating physician. The contract sets forth the responsibilities of the parties to the contract and the mode of physician reimbursement. Generally, physicians are reimbursed on a fee-for-service basis. However, they are at financial risk because a predetermined amount of the money is allocated to pay for covered services. If those funds are depleted, the participating providers are still responsible for providing covered services without pay.



Like Models V and VI, Model VII involves a situation where physicians in private fee-for-service practice agree to incorporate some prepaid patients into their practice. Usually these HMO patients represent a small fraction

of the physicians' total medical practice. Model VII is obviously a more loosely structured organization and one where good communications between plan management and participating physicians is difficult to achieve. It is essential that HMOs of this type have effective monitoring devices in place to assure that the beneficial aspects of the health maintenance organization form of health care delivery can be realized. This model has the advantage of wider market acceptance since prospective HMO members would not have to change physicians. One of the major hurdles to HMO enrollment -- the need to change physicians -- is overcome under Model VII if broad-based physician participation is achieved.

b. Model VIII. Model VIII, shown below, is nearly identical to Model VII from an operational point of view, but it contains a technical organizational difference.



While care is provided by individual physicians, all participating physicians are joined together in a separate association called an Individual Practice Association (IPA). The HMO actually contracts with the IPA and the IPA holds the contracts with each participating physician. It will be recalled that the HMO itself held contracts with each physician under Model VII.

III. THE FEDERAL HMO ACT (PUBLIC LAW 93-222), AS AMENDED

The federal HMO Act was signed into law in 1973 to encourage the development of health maintenance organizations. The legislation includes three basic types of support. First, financial assistance is provided for HMO development -- grants for feasibility studies, planning, and initial development are available along with loans to offset initial operating losses. Second, the federal law contains an override provision that is designed to alleviate the problems attending HMO development in those states with restrictive legislation. Finally, the Act assists in membership recruitment by requiring certain employers to offer the opportunity of HMO membership to their employees. This is commonly referred to as the mandatory, dual choice provision of the HMO Act. The employers subject to this mandatory, dual choice provision and the types of HMOs that can avail themselves of the benefits of the HMO Act are discussed below.

Basically, the legislation requires an employer to offer membership in a federally qualified HMO if the employer has twenty-five employees who reside in the service area of the HMO. The employer is not required to initiate contact with an HMO. The burden of invoking this provison rests with HMO management. The Act really requires much more than "dual choice." First, the Act requires the employer to offer membership in one of each of two major types of HMO organizational models if both types exist in the community. Moreover, the employer must offer HMO membership in all federally qualified HMOs whose service areas encompass the residences of 25 or more of the employer's employees, unless a federally qualified HMO of the type in question has already been made available to employees. Hence, the Act includes a mandatory "multiple choice" provision and not simply a dual choice provision.

How do the eight previously described HMO organizational models relate to the definition of a federally qualified HMO, and how is each treated under the mandatory, dual choice provisions of the law? To be federally qualified, an HMO must be determined by the Secretary of HEW to be in compliance with the provisions of the HMO Act. While this paper is concerned with the organizational requirements of the Act, it is important to recognize that federal qualification also entails compliance with benefit provisions, financial and quality of care standards, grievance procedures, and a myriad of additional items.

The Act defines an HMO as "a legal entity which provides or arranges for the provision of basic and supplemental health services to its members in the manner prescribed by, is organized and operated in the manner prescribed by, and otherwise meets the requirements of Section 1301 of the Act and the regulations of Subpart A." The definitions included in the legislation then proceed to describe three basic organizational HMO formats that are eligible for federal qualification. These alternative formats focus on the relationship of the HMO to its professional providers. Nothing is said about the arrangements for hosptial care.

The first HMO organizational structure eligible for federal qualification is commonly referred to as a "staff model." In the staff model, the HMO's health professionals are employees of the HMO. Such professionals provide services to HMO members according to policies and operational procedures determined by the HMO and are paid for their services in accordance with a compensation arrangement, other than fee-for-service, established by the HMO. Models I and III are the only ones included in the previous discussion that fit the federal definition of staff model HMOs.

A second organizational structure eligible for federal qualification is commonly referred to as a "medical group practice," or simply a "group" model. Medical group means a partnership, association, corporation or other group composed of licensed health professionals, a majority of whom are licensed to practice medicine or osteopathy. The members of such a group, "as their principal, professional activity (over 50 percent individually) engage in the coordinated practice of their profession and as a group responsibility have substantial responsibility (over 35 percent in the aggregate of their professional activity) for the delivery of health services to members of an HMO."[10] Additional requirements include pooling of income, with payment for services rendered on an agreed upon arrangement that does not include reimbursement on a fee-for-service basis. Other requirements deal with sharing of medical records and equipment, and continuing education for group members. Furthermore, an arrangement must be made so that a patient's HMO membership status is unknown to the physician rendering service.

In terms of the eight organizational structures described earlier in this study, Models II, IV, V, and VI fit the federal definition of group models. This categorization is clearest with regard to Models II and IV because in Models V and VI, HMOs frequently have difficulty in meeting the "principal professional activity" requirement. The application of this criterion has not been completely resolved. It will be noted below that some Model VI HMOs have been qualified as group models, whereas others have been qualified as IPAs. Thus, if an HMO that delivers care through groups is not able to meet the principal professional activity requirement, it may qualify as an IPA even though care is provided by medical groups.

The third organizational label applied to qualified HMOs is an individual practice association (IPA) HMO. An IPA means a partnership, association, corporation or other legal entity "which delivers or arranges for the delivery of health services and which has entered into a written services arrangement or arrangements with health professionals, a majority of whom are licensed to practice medicine or osteopathy."[11] The written services arrangement specifies the arrangement for compensation. Where possible, the IPA arranges for sharing of medical records, equipment, and professional and administrative staff between participating physicians. In addition, the IPA must arrange for and encourage continuing education for participating health professionals.

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[10] Federal Register, Vol. 43, No. 176, Monday, September 11, 1978, Part II, DHEW, Public Health Service, Health Maintenance Organizations, Proposed Requirements, p. 40378.

[11] Ibid.

Model VIII is the typical organizational structure that is intended by IPA qualification status. However, as previously mentioned, sometimes Model VI HMOs must be qualified as IPAs.[12]

Table 1 on the following page summarizes the qualification status of 62 HMOs that were federally qualified as of June 1, 1978.[13] The Table also shows how these programs relate to the previous discussion of models. The enrollment figures are estimates based upon a telephone survey conducted in the summer of 1978. Appendix 1 identifies each of the qualified HMOs by HEW Region.

Table 1 reveals that there are no qualified HMOs that meet the specifications of Model I or Model VII. Currently, the only existing HMO falling into the Model I category is Group Health Cooperative of Puget Sound in Washington. At this time, it is not qualified. A Model I HMO would be qualifiable as a staff model.

While several operating HMOs fit Model VII criteria, none of them can be qualified unless they form an IPA. It will be recalled that Model VII HMOs contract with providers individually. Federally qualified IPA HMOs contract with an IPA entity which holds contracts with individual providers. The basic reason that some group models (IV, V, and VI) are qualified as IPAs relates to the aforementioned inability of the provider groups to meet the principal professional activity requirement.

One additional point needs to be made about federal qualification status. As discussed, the mandatory, dual choice section of the HMO law requries employers to offer membership in one of each of two types of federally qualified HMOs. The previous discussion, however, identifies three organizational types. These statements are reconciled by the fact that for purposes of satisfying the dual choice provision, staff models and medical group models are placed in a combined category and IPA models are placed in a second category. Hence, employers are actually required to offer membership in an HMO of each type, i.e., an IPA and either a staff model or a group model.

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[12] It is interesting to note that the "principal professional activity requirement" does not apply to staff models. In fact, in August 1978, Matthew Thornton Health Plan, Inc. in Nashua, New Hampshire became qualified as a staff model even though the group principally does a fee-for-service business.

[13] Table 1 shows 66 qualified HMOs vs. 62 reported by DHEW. The four additional HMOs arise because HEW qualified Kaiser Northern California Region, Southern California Region, and Hawaii Region as one program, whereas Table 1 lists each region separately. Similarly, the three sites of the Family Health Program (Long Beach, California; Guam; and Salt Lake City, Utah) are included in Table 1 individually.

On September 30, 1978, the close of the federal government's fiscal year, there were 69 qualified HMOs versus the 62 discussed above.

TABLE 1

Federally Qualified HMOs by
Model Type and Qualification Status
as of
June 1, 1978

Generic Model	Total Number Qualified	Qualification Status			Approximate Enrollment
		Staff	Group	IPA	
I	None				
II	5		5		3,250,000
III	29	29			679,430
IV	11		10	1	219,465
V	3		2	1	29,000
VI	5		1	4	83,700
VII	None				
VIII	13			13	119,334
TOTALS	66*	29	18	19	4,380,929

In summary, an estimated 40 percent of all operational HMOs were federally qualified as of June 1, 1978.* The predominant organizational format for qualified HMOs is that described as Model III in this paper, followed, rather distantly, by Models IV and VIII. Seventy-five percent of the membership enrolled in HMOs is enrolled in the Model II variety due to the fact that this model describes Kaiser's organization in its largest regions.

*See note 13, supra.

IV. SOME REGULATORY AND PLANNING IMPLICATIONS OF ALTERNATIVE HMO MODELS

The impetus for this discussion paper was the perceived need to differentiate alternative HMO organizational models so that regulatory and planning decisions could be made in light of the peculiarities of each HMO type. Too often there is a tendency to apply laws and regulations uniformly to all HMOs without an appreciation for the varying impact such requirements have on alternative structures. The remainder of this paper will endeavor to mention some regulatory and planning issues frequently raised with regard to HMOs and discuss these issues in the light of alternative HMO structures.

A. HMO Development: Time and Dollar Requirements

The federal HMO legislation recognizes three stages of HMO development. The three stages, the maximum grant amounts allowed for each stage, and the estimated length of time required to complete successfully all of the requirements of each stage are as follows:

Developmental Stage	Maximum Grant	Time Period
Feasibility	$ 75,000	1 year
Planning	200,000	1 year
Initial Development	1,000,000[14]	1 year[15]

Hence, the federal legislation recognizes that it may cost as much as $2,275,000 in grant money and 5 years to create a fully operational HMO.[16] Actual grants, however, are subject to significant variation.

Experience under the federal grant program reveals that IPA models generally are less costly to develop than group or staff models. In terms of the generic models presented in Section III, it is reasonable to presume that the development of Models I through IV would require more resources than Models V through VIII. Apart from any consideration of hospital resource requirements, Models I through IV entail the establishment of an outpatient

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[14] $2,000,000 effective October 1, 1979.

[15] Regulations under development propose to extend the time allowed for initial development to three years.

[16] Both supplemental grants and time extensions are currently available. The 1978 Amendments to the HMO Act also specify that initial development grants, contracts, and loans can be used for expansion of services.

delivery system to provide services to HMO members by means of hiring health professionals (Models I and III) or by creating a new medical group (Models II and IV). This means that health care facilities must be constructed or leased and rendered suitable for health care delivery, and that medical personnel must be located, hired and paid by the HMO. Models V through VIII utilize existing health resources and facilities and obviate the need for some grant funds. However, these statements must be modified by the intended scale of the HMO.

Other factors will impact on the time and resources required to accomplish all the developmental tasks. HMOs that do not use federal grants may be able to expedite development. A significant amount of expenditures by federally supported projects will go into meeting federal reporting requirements. Moreover, the receipt of grants may depend upon the completion of designated tasks which particular HMOs may find of little importance in their specific circumstances.

Another major factor influencing the time required to reach implementation is HMO sponsorship. Perhaps the most expensive and time consuming developmental task involves the organization of the delivery system. HMOs developed by existing fee-for-service medical groups, hospitals and their medical staff, county medical societies, etc., frequently are established more quickly because much of the delivery system organizational work is simplified.

It should be clear that generalizations about the money and time required to develop an HMO are of little value. Presumably, with proper guidance, a hospital and its medical staff could develop an IPA model HMO in less than two years for approximately $250,000 (provided it was privately funded). On the other hand, the time and resources needed to develop a staff model HMO which required funds for facilities could be close to the maximums included in the federal legislation. Most HMOs, however, cost less than the maximum available to develop, but few are able to reach operational status in less than three years.

B. Initial Operating Losses and Break-Even

One of the most unfortunate generalizations made about HMOs is that 30,000 members are required before a plan reaches financial break-even. Some HMOs lose money with over 30,000 members while others make a profit with fewer than 10,000 members.

Break-even enrollment is typically defined as the membership level where HMO revenues equal HMO expenditures on a current basis. It does not identify the point in time at which revenues equal expenses on a cumulative basis. There is no particular financial magic associated with the 30,000th member. Management, either implicitly or explicitly, designates a break-even membership level when plan premiums are set. Total HMO revenues are a function of the number of subscribers and price of membership. While often subject to regulatory approval, price of membership is a management decision. The premiums ultimately charged are a function of many factors including:

- Availability of nonpremium revenues to meet cash flow needs
- Limitations in the federal loan program (applicable to qualified HMOs)

- Prices charged by competitors
- HMO operating costs
- Allocation of the plan's fixed costs

The reason that 30,000 members is frequently quoted is because group practice programs traditionally construct facilities adequate to serve 30,000 members and choose to spread their costs over a 30,000 membership base rather than some lesser or greater number. While this procedure has some appeal from the standpoint of equity, a sound business decision would not require that the costs be spread over 30,000 members.

Fundamentally, an HMO will incur two kinds of costs -- fixed and variable. The relative proportion of fixed[17] and variable costs will depend on the type of model and the method of reimbursement employed. HMOs that do not set their premium level sufficient to recover, at a minimum, all variable costs,[18] will never break-even. HMOs that are able to minimize fixed costs as a percent of total costs, would be able to break even at a lower membership level than an HMO with a higher percentage of fixed costs (other things being equal). In terms of the eight models presented in this paper the ranking with respect to break-even enrollment would be as follows:

Table 2

BREAK-EVEN ENROLLMENT

Model I	Highest break-even enrollment
Model II	
Model III	
Model IV	
Model VII and VIII	
Model VI	
Model V	Lowest break-even enrollment

Models I and II are at the top of the list because the expenses of hospital ownership represent substantial fixed costs. These costs would have to be spread over a substantial membership base in order to allow the program to charge a competitive premium. Typically, hospital costs incurred by the other

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[17] In the context of this discussion, fixed costs are defined very broadly. Basically, they include all costs that do not vary directly and immediately with membership.

[18] Ratemaking is discussed in Section IV, Part C of this paper.

organizational models' would be variable with membership. Model I would usually require a larger break-even membership than Model II due to the different financial responsibilities entailed in a staff model versus a group practice model. In a staff model a minimum level of staffing will be required to serve the initial membership. Often the membership level will not produce a workload sufficient to keep the staff fully occupied. Since the staff members are salaried employees, the HMO will incur some personnel costs which may be somewhat fixed in the short-run. Hence, the staff model may incur some expense in supporting unused capacity through salary payments.

In the group model, some of this fixed financial burden may be shifted to the medical group. This occurs if the medical group is reimbursed on the basis of capitation payments and the capitation is based upon anticipated utilization without any subsidy for unused capacity. The medical group, in this instance, would be required to finance their own fixed costs out of fee-for-service income or other sources. It is possible, however, that the HMO would underwrite the financial losses of the group, in which case Models I and II would be financially very similar. Yet, if the HMO reimburses for outpatient care on the basis of capitation payments it should incur less fixed costs relative to total costs than a staff model and, other things equal, be able to attain break-even at a lower membership level. This same rationale explains the relative ranking of Models III and IV.

The remaining four models may involve very low fixed costs since they rely on the existing delivery system and nearly always are able to make their entire health care delivery costs variable by reimbursing on the basis of capitation payments or fee-for-service. Essentially, under these models, the HMO incurs no health care costs unless it enrolls members. This is never true of staff models and sometimes not true in group models (i.e., where subsidies are involved). The preceding ranking recognizes that IPA - type HMOs will usually incur more fixed costs than Models V and VI because of the more complex systems usually necessary for the administration of physician payments. Since IPAs generally reimburse on a fee-for-service basis, claims administration is still required.

In the final analysis, if HMOs charge premiums at least equal to variable costs, break-even enrollment will vary directly with fixed costs. Those HMOs organized around the existing system ought to be able to operate with less fixed costs than HMOs which organize their own delivery system. This financial fact, however, must be balanced against the HMO's desire for control in order to achieve efficiency. The more costs that are made directly and immediately variable with membership, the more risk is passed on to another entity. The entity accepting the increased risk generally will tolerate less intervention and control from the plan. Thus, HMO sponsors may find immediate financial advantages accompanied by long-term efficiency problems.

C. HMO Premium Development and Rate Regulation

The premiums charged by HMOs generally are subject to the approval of state insurance department regulatory officials. The standards applied to HMO rate filings are not well developed. In fact, insurance regulators tend to view an HMO rate filing in the same manner as they see a Blue Cross/Blue

Shield filing -- the only other health insurance rates over which most states have prior approval authority. Few states have developed specific standards that they apply to health insurance rate filings. Rather, they tend to rely on the standard, statutory rate regulatory criteria of "adequacy, reasonableness and not unfairly discriminatory." Under these standards, rates are approved if they are high enough so as not to jeopordize an insurer's solvency (adequate), not so high as to result in excessive profit (reasonable), and equitable (not unfairly discriminatory).

As of this date, the application of the reasonableness criterion has caused few problems for HMOs. However, the adequacy requirement gives rise to some conflict between HMOs and rate regulators. Because HMOs are new organizations and are characterized by little or no surplus or equity funds, regulators are frequently hesitant to permit an HMO to charge a rate that does not fully recover its costs. This stems from the overriding regulatory concern for solvency. It is a politically difficult decision to permit an organization to market a product at a price which is acknowledged by everyone concerned to be inadequate on a current basis. On the other hand, if the HMO is forced to charge a break-even rate immediately, it would probably mean that the competitive marketing of the plan would be infeasible. How can this dilemma be reconciled?

At least two arguments can be put forth to rationalize the approval of a rate structure that admittedly does not recover anticipated costs. The first argument can be based on the equity criterion. Is it fair to require the initial members of an HMO to incur a disproportionate share of the HMO's fixed costs? If the minimum opening staff of an HMO is adequate to service 5,000 members but only 2,500 are anticipated the first year, it could be argued that recovery of some of the costs of the first year's operations should be postponed until subsequent years. This would permit a more equitable spreading of the costs over the membership presumed to benefit from the use of those resources. Of course, some test of reasonableness ought to be applied. For example, are the unrecovered costs largely unavoidable? Also, is the deferral period of acceptable length?[19]

A second rationale is based upon the definition of "adequacy." Does adequacy mean that the price charged each class of policyholders (e.g. group vs. non-group) must be self-sustaining, or does it mean that each line of business must be self-sustaining, or, does it mean that the rates charged by the company overall must not place the company's solvency in jeopordy? All three views have been employed. Moreover, does the adequacy criterion, however defined, imply a one year time period or may a longer time frame be considered? If regulators are willing to view the adequacy of a rate structure over some reasonable time period, a rate below that needed to recover total costs in one period ought to be eligible for approval if a plan is submitted that demonstrates that a rating plan has been developed which will permit an adequate

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[19]This rationalization is more appropriate for an entirely new organization than it is for an existing one merely introducing a new product line. In the latter instance there will already exist a membership base over which costs can be spread and/or there may be an existing surplus to finance product development.

price to be reached within a reasonable time period within the financial capacity of the HMO to absorb losses.[20]

What has been said about ratemaking thus far applies to most newly developed HMOs regardless of model types. Their benefit programs are broad and costly because, at least in the early years, they are required to pay current market rates for the personnel and services they assemble to provide care. The current premiums charged for traditional insurance programs usually will force the HMO to set its rates at a level below its full financial requirements or face the prospect of being non-competitive. Obviously, if initial rates are less than adequate to recover costs, it follows that subsequent premiums will have to increase at a greater rate than the increase in costs if a break-even point is to be attained. This is not unreasonable provided that the HMO has established a position in the marketplace and is able to contain the costs of provided services more effectively than the traditional system.[21]

The actual impact of this "undercharge/overcharge" phenomenon is minimized in most HMOs by the typical pattern of enrollment growth. In the beginning years when membership is low a substantial undercharge will not produce a large, absolute financial loss because of the low activity level. In subsequent years, even a small surcharge may produce a large financial surplus because of increased membership. The federal loan program is designed to provide funds to HMOs to underwrite the cash flow needs resulting from "undercharges" during early years. Obviously, the HMO must subsequently generate enough revenue to repay these loans.

In general, the preceding considerations apply to all newly developed HMOs, but different organizational models present different problems. Consider the comparative positions of a staff model and an IPA-type program. In the former case, nearly all of the costs of the HMO, except hospital costs, will be relatively fixed in the short-run. It seems to be characteristic of rate regulators to require the HMO to set its rates at a level that will recover, at a minimum, all of its variable costs. If a staff model HMO has a relatively high level of fixed costs and the rate authorities condone deferring the recovery of these costs to future periods, a significant subsidization of current rates may result. On the other hand, HMOs with few fixed costs (basically those that reimburse for care on a per member per month or fee-for-service basis) will be permitted to offer only a slightly subsidized rate if the regulators require current rates adequate to recover all variable costs.

This can present an HMO manager with a dilemma. A significant subsidy may be required to be competitive with traditional insurance programs and/or other HMOs. On the other hand, a desire to minimize initial operating losses may

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[20] Currently, federally qualified HMOs have the ability to receive loans up to a total of $2.5 million (maximum of $1.0 million annually) to underwrite the losses incurred during the first five years of operation. As of 10/1/79, the loan availability increases to $4.5 million (maximum of $2.0 million annually).

[21] In general HMO rates have increased, on the average, more slowly than traditional insurance rates.

lead to arrangements whereby most costs are made variable with membership. An HMO in which variable costs are high relative to total costs will have little margin for subsidy if the regulatory authorities permit only fixed costs to be deferred even though the absolute financial losses are minimized under these circumstances.

A reasonable and business-like approach to ratemaking and rate regulation will ameliorate some of these tensions. HMO managers must be sympathetic to the objectives of rate regulation. They should be required to present rate structures and financial statements that are based on reasonable assumptions, can be monitored, and will achieve adequacy, reasonableness and equity within a mutually acceptable period of time. The regulators must recognize that HMOs are health care delivery systems while insurance companies are fiscal intermediaries. Health insurers are basically cost pass-through organizations and are characterized by very low fixed costs. The need for a slightly altered regulatory view toward HMOs is apparent, but the question of what practices are acceptable remains undefined.

D. Market Saturation

How many HMOs should be permitted to incorporate and operate in a given area? Some maintain that if 30,000 members are necessary to reach break-even that the total area population divided by 30,000 members should define the maximum number of HMOs permitted to operate. However, a previous section of this paper revealed the impropriety of the 30,000 figure as a rule-of-thumb for break-even. Is there some other method for determining when a market is saturated with HMOs, or, is the question of market saturation not relevant in the first place? This is a complex question.

When a physician desires to practice medicine and applies for a license, the licensing authorities do not decline to issue a license based on market saturation. When insurance companies, including health insurance companies, apply for a license to do business, they are rarely denied a license based on an oversupply of existing insurers. Yet when hospitals want to expand, or, when someone desires to construct a hospital, permission to do so frequently is denied because an adequate supply (or oversupply) of resources already exists.

The basic difference in approach stems from current reimbursement practices. Permitting new or expanded hospital facilities carries an implicit guarantee that such hospital facilities will recover their total costs assuming that reimbursement for hospital care will be made on a cost basis.

On the other hand, if an insurance company cannot market its products it will not recover its costs and ultimately it will be forced out of the market. Similarly, physicians have to compete for patients and revenues. The licensing of physicians and other health professionals does not carry a guarantee that their income objectives will be realized since they are not typically cost-based reimbursed.

For planning and licensing purposes, there is a tendency to view HMOs more like hospitals than like physicians or health insurers. This is in spite of the fact that HMOs are not cost-based reimbursed. HMOs must compete against insurers and other HMOs for members. If they are unsuccessful in the

marketplace, no one guarantees their survival. Therefore, permission to operate an HMO does not carry with it an automatic commitment of more resources to the health care sector.

One of the strong arguments in favor of HMOs is their ability to inject an element of competition into a marketplace traditionally lacking in competition. If one is willing to take a longer view, the dangers of setting limits on the number of HMOs in a given market become apparent. If HMOs are more successful in containing costs than the traditional system, the prices they will charge will begin to compare favorably with traditional insurance premiums. If the only competition HMOs face is the traditional system there will be little pressure to stop HMO premiums from rising to the level of the competition. Furthermore, in non-profit HMOs, expenses can be allowed to rise to nearly equal total revenues. The best safeguard against this situation is the existence of multiple alternative delivery systems competing against each other for members. The best way to safeguard the continuing efficiencies of HMOs is to create an economic environment where price continues to reward efficient HMOs with increased enrollment.

Regulatory authorities, however cannot disregard the need to protect HMO members against the consequences of an HMO failure. This can be accomplished in a number of ways but it is doubtful that the best way to do so is by virtually precluding the possibility of insolvency. The regulatory responsibility is membership protection, not HMO protection.

Nearly all HMO members select the program under a dual choice option. Members are periodically given the opportunity to opt in or out of the prepaid program. In the event of HMO insolvency, members could revert to traditional coverage and not lose benefits. HMO provider contracts could soften the consequences of insolvency by requiring HMO providers to continue to provide services until master and/or subscriber contract renewal dates. Also, regulators can require additional member protection by requiring adequate financial safeguards in the form of plan surplus and/or reinsurance arrangements.

One very important economic fact must be kept in mind when evaluating the desirability of the expansion of HMOs, surgi-centers, home health care, and other delivery systems that tend to serve as alternatives to inpatient hospital care. If HMOs produce their largest economies through reductions in hospital utilization, it would seem that as HMOs grow, the need to devote resources to provide inpatient care should diminish. It is not uncommon to hear HMO supporters state that HMOs save money because they reduce inpatient utilization. This dollar amount is often calculated simply by multiplying the estimated days saved by the per diem. These savings are only "real" if hospitals, in fact, pare their operating costs by an amount equal to the estimated savings. The fact is that this is not likely to happen. Generally, hospitals will not cut back their level of operations until forced to do so. The pressure to cut back is greatly reduced by cost-based reimbursement wherein hospitals are compensated for all costs incurred regardless of the level of activity. Hence, HMO "savings" cannot be translated into community-wide savings unless the resources consumed by hospitals in providing services are reduced. This circumstance produces the curious result that alternatives to inpatient care are often discriminated against, not because they are inefficient or ineffective, but because existing hospital reimbursement methods

continue to pay hospitals for unused service capacity when patients receive care from more efficient delivery systems (e.g., HMOs).

E. Rate-Related Concerns

In most states HMO rates and financial activities are subject to regulation by the department of health and/or the department of insurance. Often rates are subject to prior approval and may be challenged in public hearings. Frequently, HMOs also must file periodic financial reports and may be subject to periodic on-site examinations by state representatives -- usually insurance department examiners.

Some HMO organizational formats present particular regulatory problems apart from the regulator's general lack of understanding of HMO operations. Usually Models I thru IV are straightforward, relatively self- contained operations. Models V through VIII, however, are frequently sponsored by related entities, and responsibilities are often joint rather than split. For example, in Model V, facilities and staff of the fee-for-service group practice may be used to perform the administrative functions of the HMO in addition to their regular non-HMO duties. Too often, cost allocations are improperly performed, rendering it virtually impossible to assess the financial performance of the prepaid plan. This also could be the case in IPA programs using medical society or hospital personnel and/or facilities. Proper expense allocations are essential, both for assessment of financial performance and for the purpose of informed rate approval.

A related question arises in those cases where the HMO contracts with a medical group or IPA for the provision of services to HMO members. Does a regulator's authority and right to examine an HMO extend to independent contractors utilized by the HMO? Can the reasonableness of a capitation payment to a medical group (probably the largest single component of an HMO's premium) be ascertained without examination of the operation of the medical group? The specific circumstance will dictate the answers to these questions. At a minimum, however, it appears advisable for the HMO to be explicit in writing the procedures followed and organizational principles adhered to in establishing the levels of reimbursement for the major contracting parties.

F. Other Issues

The relevance of numerous addtional regulatory issues is heavily influenced by the organizational structure of the HMO. Some issues relate to:

- Disposition of operating surplus
- Minimum acceptable quality control procedures
- Maximum and minimum levels of HMO surplus
- Procedures used to estimate loss reserves

A complete discussion of all the issues is beyond the scope of this paper. Moreover, the answers to many of the problems are only beginning to emerge.

G. Summary

The purpose of this paper was to set forth the salient characteristics of alternative HMO structures so that regulators, planners, and others would become more sensitive to the unique features of various programs. The differences between various HMOs are often greater than the differences between some HMOs and traditional insurance programs. Generalizations about HMOs are highly questionable. As a result, any regulatory framework for such organizations should be characterized by substantial flexibility.

APPENDIX I

FEDERALLY QUALIFIED HEALTH MAINTENANCE ORGANIZATIONS, BY DHEW REGION, AS OF JUNE 1, 1978

REGION I: Connecticut, Maine, Massachusetts, New Hampshire, Vermont, Rhode Island

Name of Plan	Model Type	Qualification Status	Membership
Community Health Care Center Plan, Inc. New Haven, Conn.	III	Staff	23,000
Harvard Community Health Plan Allston, Mass.	III	Staff	76,000
Connecticut Health Plan Bridgeport, Conn.	III	Staff	5,000
Rhode Island Group Health Association, Inc. North Providence, Rhode Island	III	Staff	26,000
Valley Health Plan Amherst, Mass.	VI	Group	8,000

REGION II: New York, New Jersey, Puerto Rico, Virgin Islands

Manhattan Health Plan, Inc. New York, New York	III	Staff	1,000
Capital Area Community Health Plan Latham, New York	III	Staff	14,000
Central Essex Health Plan Orange, New Jersey	III	Staff	3,015
Health Care Plan of New Jersey Moorestown, New Jersey	V	IPA	13,500
Crossroads Health Plan East Orange, New Jersey	VIII	IPA	200

Name of Plan	Model Type	Qualification Status	Membership
Rutgers Community Health Plan New Brunswick, New Jersey	III	Staff	23,222
Group Health Plan of New Jersey Guttenberg, New Jersey	III	Staff	3,125
Genessee Valley Group Health Association Rochester, New York	IV	Group	36,000
Westchester Community Health Plan White Plains, New York	III	Staff	11,000
REGION III: Delaware, Maryland, Pennsylvania, Virginia, West Virginia, District of Columbia			
Georgetown University Community Health Plan Washington, D.C.	III	Staff	42,287
Group Health Association, Inc. Washington, D.C.	III	Staff	109,000
The HMO of Pennsylvania Willow Grove, Pennsylvania	VIII	IPA	10,000
Metropolitan Baltimore Health Care, Inc. Baltimore, Maryland	III	Staff	425
Penn Group Health Plan, Inc. Pittsburgh, PA	IV	Group	16,000
Health Service Plan of Pennsylvania Philadelphia, PA	IV	Group	13,000
REGION IV: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee			
American Health Plan, Inc. North Miami Beach, Florida	IV	Group	6,000

Name of Plan	Model Type	Qualification Status	Membership
Health Care of Louisville, Inc. Louisville, Kentucky	III	Staff	9,000
Florida Health Care Plan, Inc. Daytona Beach, Florida	III	Staff	8,000
AvMed Health Plan, Inc. Miami, Florida	VIII	IPA	200
Piedmont Health Care Corporation Greenville, South Carolina	III	Staff	3,200
REGION V: Illinois, Indiana, Michigan, Ohio, Wisconsin, Minnesota			
Kaiser Community Health Foundation Cleveland, Ohio	II	Group	110,000
Group Health Cooperative of South Central Wisconsin Madison, Wisconsin	III	Staff	3,500
Share Health Plan St. Paul, Minnesota	III	Staff	19,000
Health Central Lansing, Michigan	III	Staff	3,000
Marion Health Foundation Marion, Ohio	VIII	IPA	8,000
Michigan Health Maintenance Organization Plans, Inc. Detroit, Michigan	VI	IPA	28,000
Group Health Plan of Southeast Michigan Warren, Michigan	III	Staff	3,000
Anchor Organization for Health Maintenance Chicago, Illionis	III	Staff	22,000
Metro Health Plan Indianapolis, Indiana	III	Staff	14,000

Name of Plan	Model Type	Qualification Status	Membership
HMO of Illinois, Inc. Chicago, Illinois	VI	IPA	9,700
Michael Reese Health Plan, Inc. Chicago, Illinois	III	Staff	12,000
North Communities Health Plan, Inc. Evanston, Illionis	IV	Group	11,000
Intergroup Prepaid Health Services, Inc. Chicago, Illinois	VI	IPA	22,000
REGION VI: Arkansas, Louisiana, New Mexico, Oklahoma, Texas			
Health Maintenance Organization of Baton Rouge Baton Rouge, Louisiana	IV	Group	1,200
The Prudential Health Care Plan, Inc. Houston, Texas	V	Group	14,000
Group Health of El Paso El Paso, Texas	V	Group	1,500
Region VII: Iowa, Kansas, Missouri, Nebraska			
Community Group Health (Plan) (Prime Health) Kansas City, Missouri	III	Staff	16,000
REGION VIII: Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming			
Comprecare, Inc Colorado Health Care Services, Inc. Denver, Colorado	VIII	IPA	28,000
Kaiser Foundation Health Plan of Colorado Denver, Colorado	IV	Group	94,265
Family Health Program Utah Salt Lake City, Utah	III	Staff	17,456

Name of Plan	Model Type	Qualification Status	Membership
Rocky Mountain HMO, Inc. Grand Junction, Colorado	VIII	IPA	10,571
Choicecare Health Services, Inc. Fort Collins, Colorado	VIII	IPA	18,063
REGION IX: Arizona, California, Hawaii, Nevada, Guam, Trust Territories, American Samoa			
South Los Angeles Community Health Los Angeles, California	VIII	IPA	7,000
Foundation Health Plan Sacramento, California	VIII	IPA	1,000
Kaiser Foundation Health Plan, Inc.			
a) Los Angeles, CA	II	Group	
b) Oakland, CA	II	Group	2,900,000
c) Honolulu, Hawaii	II	Group	
California Medical Group Health Plan Los Angeles, California	III	Staff	120,000
Health Alliance of Northern California, Inc. San Jose, California	IV	Group	21,000
Family Health Services, Inc. Pomona, California	VI	IPA	16,000
Family Health Program			
a) Long Beach, CA.	III	Staff	80,000
b) Tamuning, Guam	III	Staff	
Maxi-Care Hawthorne, California	VIII	IPA	20,000
HMO Concepts, Inc. Orange, California	VIII	IPA	0
The Northern California Institute for Medical Services, Inc. Oakland, California	IV	IPA	9,000

REGION X: Alaska, Idaho, Oregon, Washington

Name of Plan	Model Type	Qualification Status	Membership
Gem Health Association Boise, Idaho	IV	Group	6,000
Portland Metro Health, Inc. Portland, Oregon	VIII	IPA	14,500
Cooperative Health Plan of Greater Spokane Spokane, Washington	IV	Group	6,000
Capitol Health Care, Inc. Salem, Oregon	VIII	IPA	1,800
Kaiser Foundation Health Plan of Oregon	II	Group	240,000
Sound Health Association Tacoma, Washington	III	Staff	12,000

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